

ILLEGIB

Approved For Release 2000/08/04 : CIA-RDP78T05439A000300240053-8

Next 4 Page(s) In Document Exempt

Approved For Release 2000/08/04 : CIA-RDP78T05439A000300240053-8

~~TOP SECRET~~

Copy 5

19 Pages

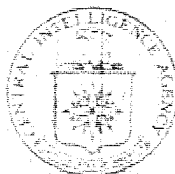
NPIC/R-103/64

February 1964

PHOTOGRAPHIC INTERPRETATION REPORT

POSSIBLE ANTIMISSILE MISSILE ASSOCIATED FACILITIES MOSCOW AREA, USSR

DECLASSIFICATION REVIEW BY NIMA / DoD



CIA



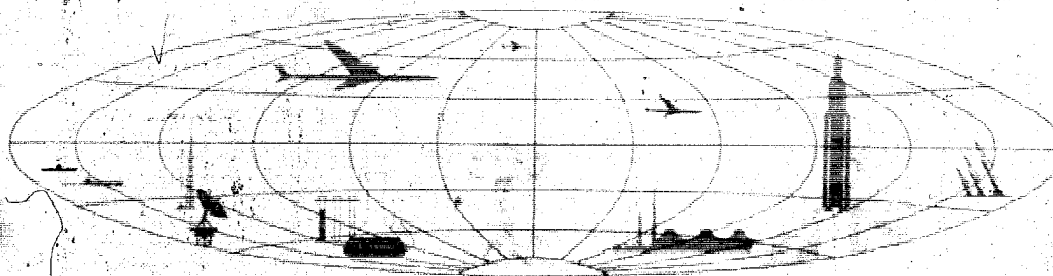
DIA

Handle Via **TALENT - KEYHOLE** Control Only

WARNING

This document contains classified information affecting the national security of the United States within the meaning of the espionage laws U. S. Code Title 18, Sections 793 and 794. The law prohibits its transmission or the revelation of its contents in any manner to an unauthorized person, as well as its use in any manner prejudicial to the safety or interest of the United States or for the benefit of any foreign government to the detriment of the United States. It is to be seen only by personnel especially indoctrinated and authorized to receive TALENT-KEYHOLE information. Its security must be maintained in accordance with KEYHOLE and TALENT regulations.

NATIONAL PHOTOGRAPHIC INTERPRETATION CENTER



~~TOP SECRET~~

GROUP 1
Excluded from automatic
downgrading and declassification


TOP SECRET CHESS RUFF

PHOTOGRAPHIC INTERPRETATION REPORT

POSSIBLE ANTIMISSILE MISSILE
ASSOCIATED FACILITIES
MOSCOW AREA, USSR

NPIC R-103 64

February 1964



NATIONAL PHOTOGRAPHIC INTERPRETATION CENTER

TOP SECRET CHESS RUFF

TOP SECRET CHESS RUFF

NPIC/R-103/64

PREFACE

This report has been prepared under NPIC project JN-212/62 as a partial answer to numerous requirements for information on Soviet anti-missile (AMM) defenses in the Moscow area. Additional reports based on KEYHOLE photography have been prepared on all Moscow SA-1 SAM sites. For each site a photograph is provided, significant changes since the first KEYHOLE coverage are noted, and all KEYHOLE photographic coverage through [REDACTED] is listed. The reports, by quadrant, are as follows: northeast, NPIC/R-64/64; southeast, NPIC/R-90/64; southwest, NPIC/R-71/64; and northwest, NPIC R-81/64.

25X1D

- III -

TOP SECRET, CHESS RUFF

TOP SECRET CHESS RUFF

NPIC/R-103-64

25X1D

25X1D

25X1D

INTRODUCTION

This report furnishes information available on KEYHOLE photography through [REDACTED] that may be related to AMM activity in the Moscow area. It supplements and updates a previous report [REDACTED] and provides information on some facilities not covered by it, although it does not cover the SAM assembly and support facilities near Moscow. A search of the Moscow area through [REDACTED] re-

vealed no recognizable AMM launch positions.

Four sites at which activities parallel the construction development of certain facilities at the Sary-Shagin Antimissile Test Center (SSATC) are covered in the first part. Construction chronology is summarized in Table 1. The second part is concerned with unidentified activity that is suspect but cannot be directly related to AMM defense.

25X1D

25X1D

POSSIBLE AMM-ASSOCIATED FACILITIES

25X1D

KEYHOLE photography of [REDACTED] revealed a facility at a fourth Moscow SAM site, E05-1, similar to possible AMM-associated facilities at the SSATC. The three previously identified facilities [REDACTED] are at Moscow SAM Sites E15-1, E24-1, and E33-1. Each of the Moscow facilities has a triad of buildings composed of a rectangular building, 225 by 125 feet, and two smaller buildings, 100 by 100 feet. The triad is always at the opposite end of the herringbone from the guidance area, and the two smaller buildings are on the side facing Moscow. There is also an associated unidentified ground pattern approximately 750 to 900 feet from the large rectangular building toward the centerline of the launch area.

of three sites in [REDACTED]. The triad at the fourth site, E05-1, was apparent in [REDACTED] on the first clear photographic coverage since [REDACTED]

25X1D

25X1D

25X1D

Facilities at sites E05-1 and E24-1 are diagonally opposed at a distance of approximately 91.5 nautical miles (nm); sites E15-1 and E33-1 are diagonally opposed at 91.8 nm. At all sites except E05-1, the exteriors of the buildings appeared complete in [REDACTED] and included unidentified circular objects positioned on the roofs. A line connecting the objects on the roofs of the three buildings would not form an equilateral triangle as at similar facilities at the SSATC. Orientation of the facility is considered as based on a perpendicular bisector of an imaginary line between the objects on centers of the roofs of the two 100-by-100-foot buildings.

25X1D

MOSCOW SAM SITE E05-1

This site is approximately 44 nm northeast of Moscow at 56-14-34N 38-35-05E (Figure 1). The possible AMM-associated facility was first identified on photography of [REDACTED], but the poor image quality of the photography permitted identification only. A review of earlier photography showed that related construction had occurred as early as [REDACTED]

25X1D

25X1D

TOP SECRET CHESS RUFF

TOP SECRET CHESS RUFF

NPIC/R-103/64

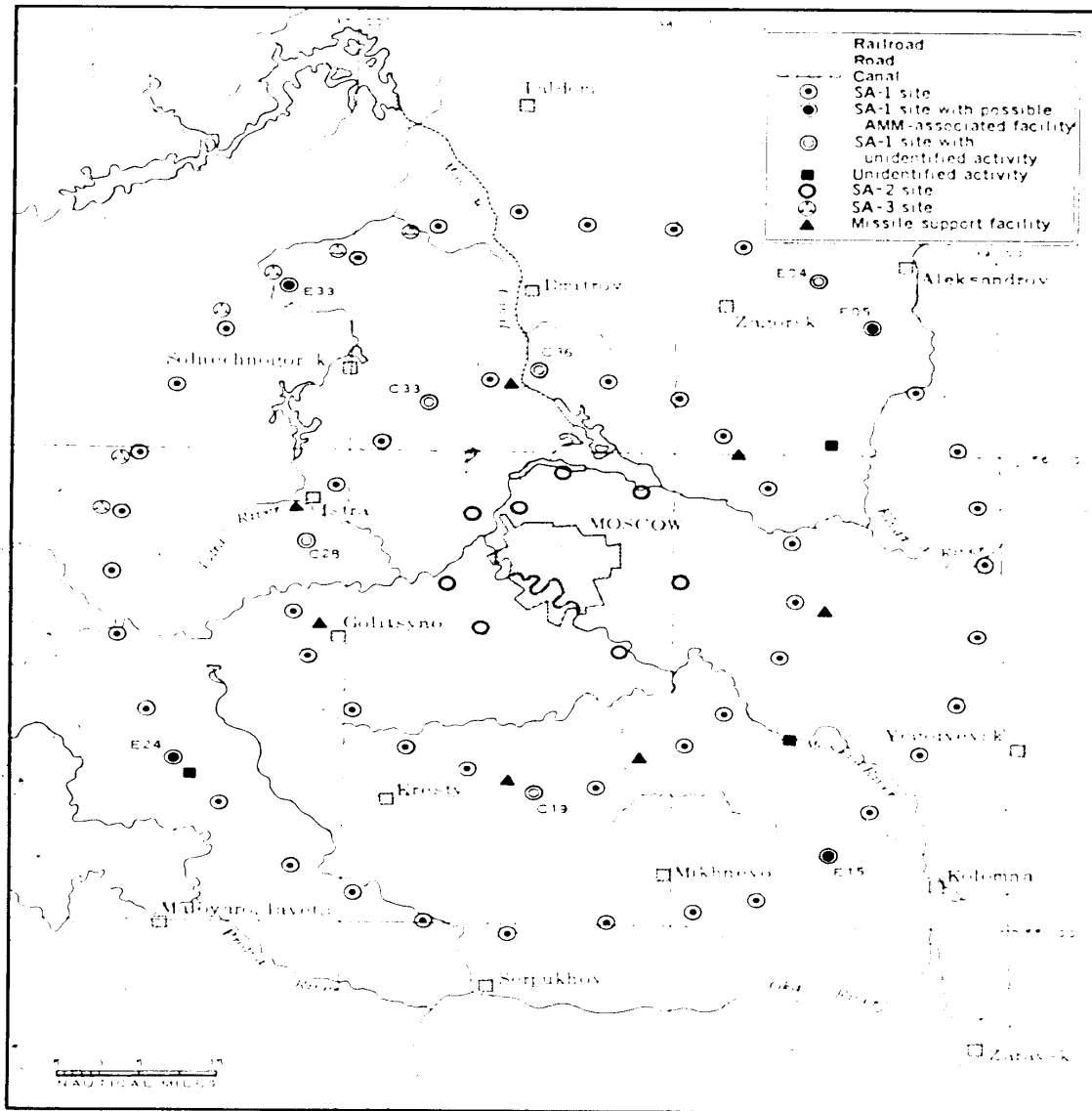


FIGURE 1. MOSCOW AREA.

- 2 -

TOP SECRET CHESS RUFF

TOP SECRET CHESS RUFF

NPIC/R-103/64

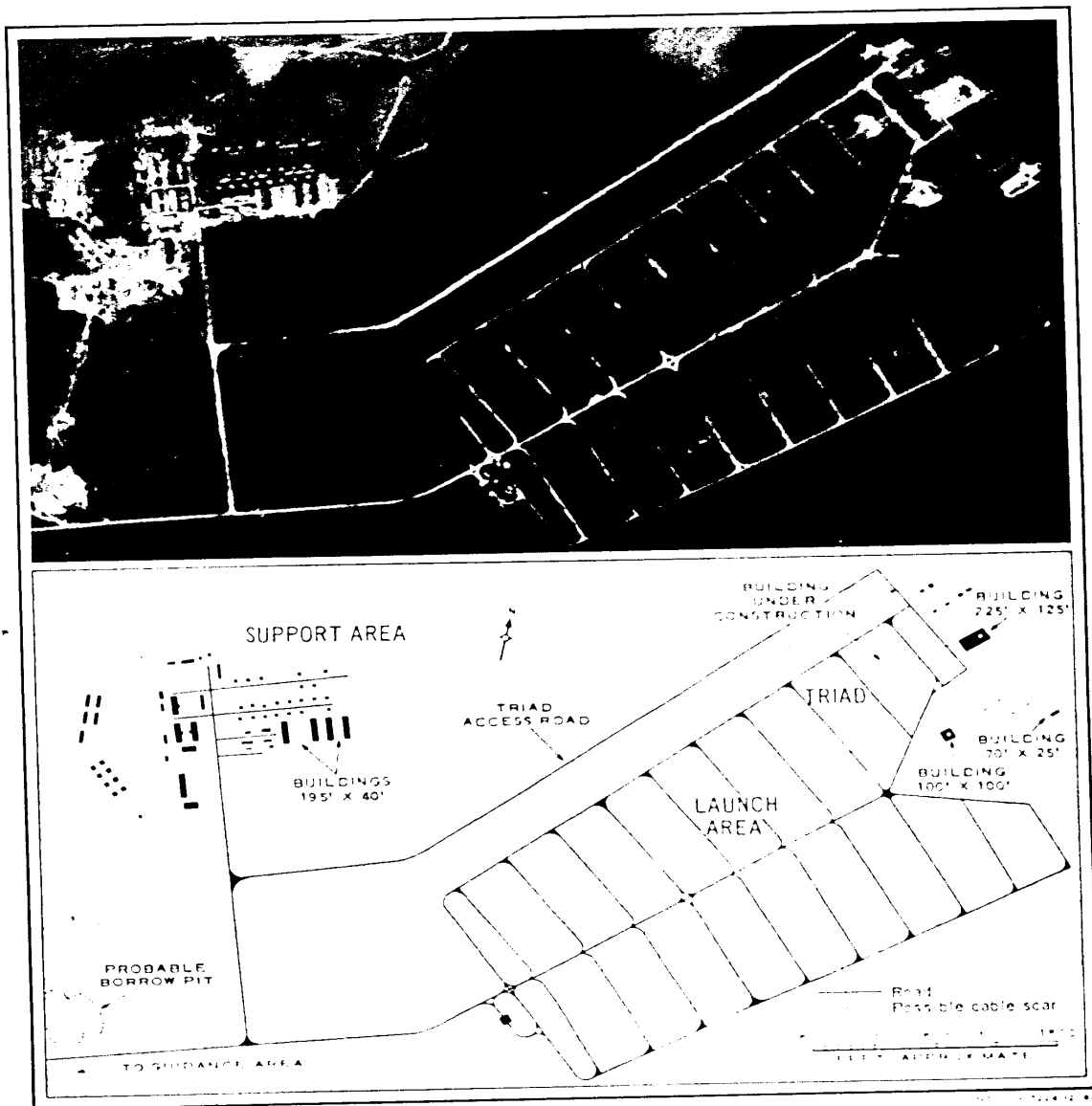


FIGURE 2. POSSIBLE AMM-ASSOCIATED FACILITY, CAM SITE EDS-1, [REDACTED]

- 3 -

25X1D

TOP SECRET CHESS RUFF

TOP SECRET CHESS RUFF

NPICLR-103,64

25X1D

25X1D

Support Area. In [REDACTED] the southeast corner of the support area had two buildings that were 195 by 40 feet and approximately 30 feet high. These buildings are not observed on photography of [REDACTED] although snow cover limits detailed analysis. By [REDACTED] a third building of similar size had been completed, and an access road paralleling the launch area had been constructed to the triad area. This was the last clear coverage of the site until [REDACTED] (Figure 2), by which time a number of changes were apparent. A fourth building 195 by 40 feet had been built in the support area. All four buildings are at right angles to the service road. A gap large enough to accommodate another building has been there since [REDACTED]

Possible AMM-Associated Facility. In the northeast corner of the SA-1 launch area, the possible AMM-associated facility included the following, on coverage of [REDACTED]

A rectangular building 225 by 125 feet and approximately 30 feet high had an unidentified circular object positioned on the center rear of the roof. There also were two or three other small objects, possibly construction material or equipment. The building was served by a rib road that had been added to the herringbone, and a possible cable scar extends southeast from the rectangular building toward the centerline of the launch area to a cleared area where unidentified ground patterns have been seen at other facilities. A short section of cable scar also branches toward the southwest 100- by 100-foot building.

One 100- by 100-foot building appeared complete and had an unidentified circular ob-

form a triangle with sides approximately 800, 840, and 1,000 feet long. The facility is oriented on an azimuth of [REDACTED]

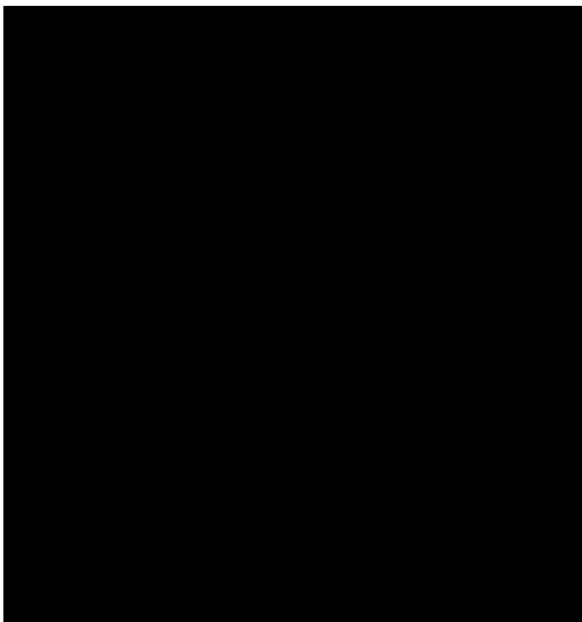
In a clearing approximately 890 feet southeast of the large rectangular building there is a 70- by 25-foot structure which may be in the early stages of construction similar to that at sites E24-1 and E33-1.

Other Construction. At the end of the launch area and on the northern side of the large rectangular building, there are three cleared and connected areas of unidentified activity. One clearing has four small structures, one has two, and the third has a small circular object positioned in the center.

A probable borrow pit along the site service road west of the launch area appeared larger than in [REDACTED]

MOSCOW SAM SITE E15-1

ILLEGIB



ILLEGIB

TOP SECRET CHESS RUFF

TOP SECRET CHESS RUFF

NPIC/R-103/64

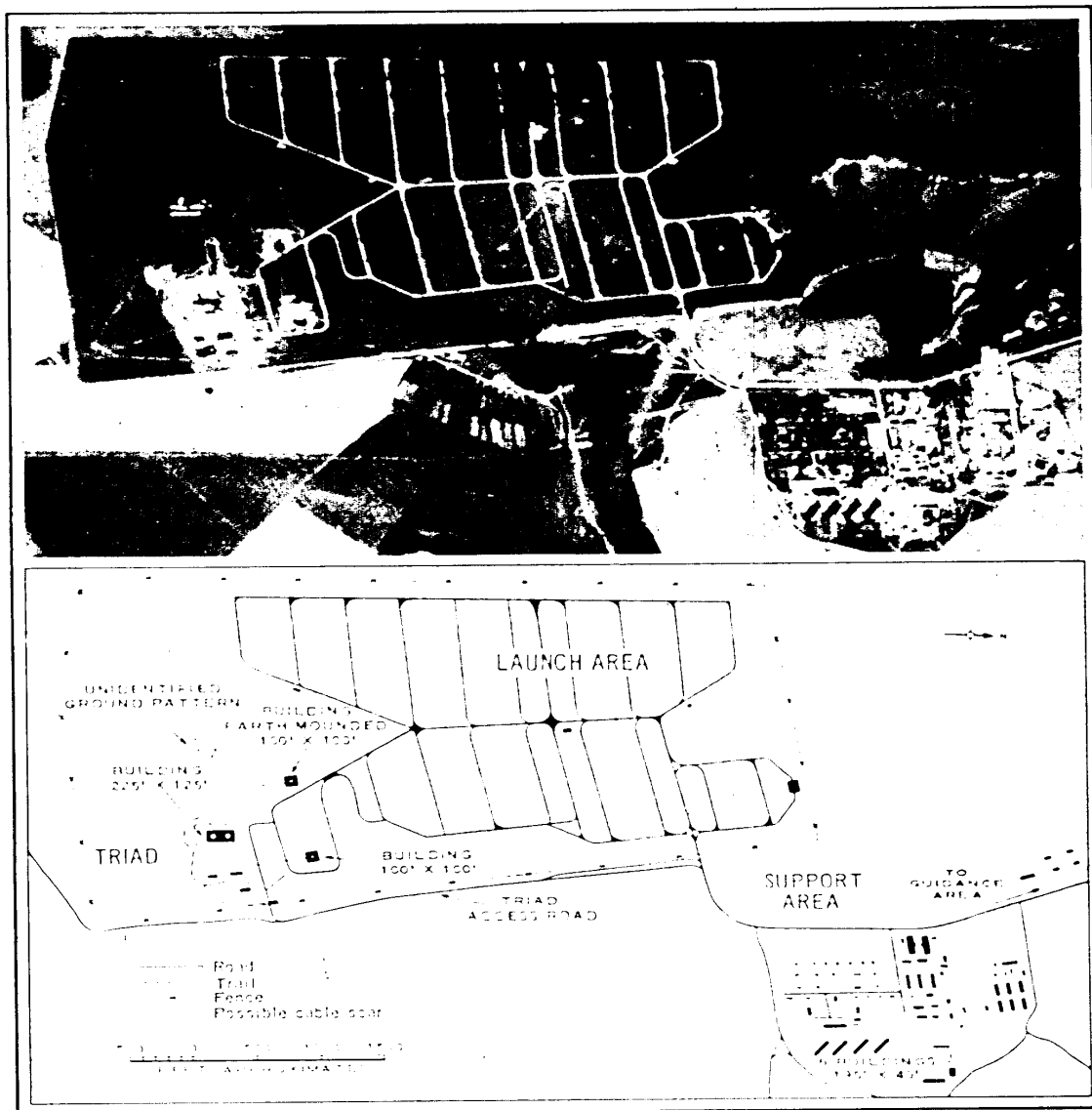


FIGURE 1. POSSIBLE AMMUNITION FACILITY, TAMUITE SITE, [REDACTED]

25X1D

TOP SECRET CHESS RUFF

ILLEGIB

Approved For Release 2000/08/04 : CIA-RDP78T05439A000300240053-8

Approved For Release 2000/08/04 : CIA-RDP78T05439A000300240053-8

25X1D

MOSCOW SAM SITE E33.1

This site is approximately 45 nm northwest of Moscow at 56-20-00N 36-48-27E. On the first clear KEYHOLE coverage, [REDACTED] the site appeared complete and a nearby SA-3 SAM site [REDACTED] of the F-configuration,

was also complete. There had been no change in the SA-3 site through photography of [REDACTED]

Support Area. In [REDACTED], the eastern side of the support area included four buildings, each 195 by 40 feet and approximately 30 feet high. An additional building of the same size

25X1D

25X1D

25X1D

25X1A

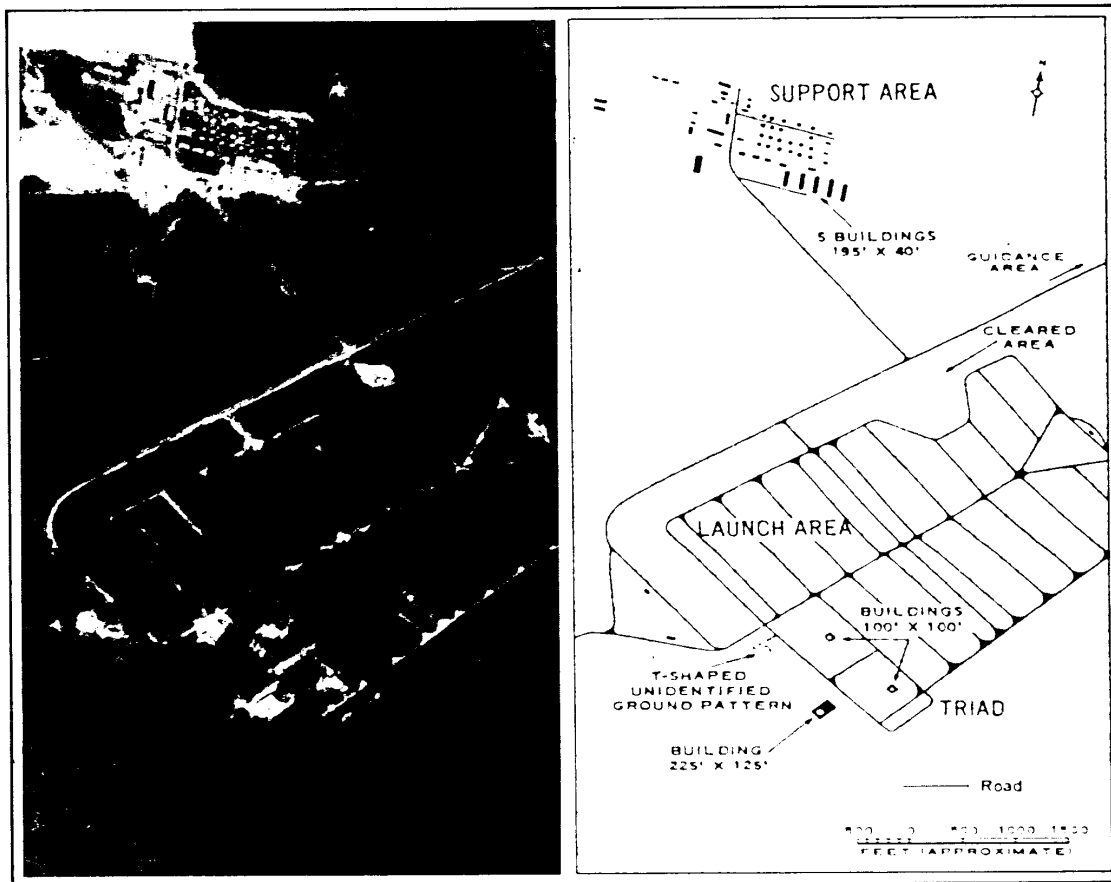


FIGURE 4. POSSIBLE AMM-ASSOCIATED FACILITY, SAM SITE E24-1, [REDACTED]

25X1D

TOP SECRET CHESS RUFF

NPIC R-103/64

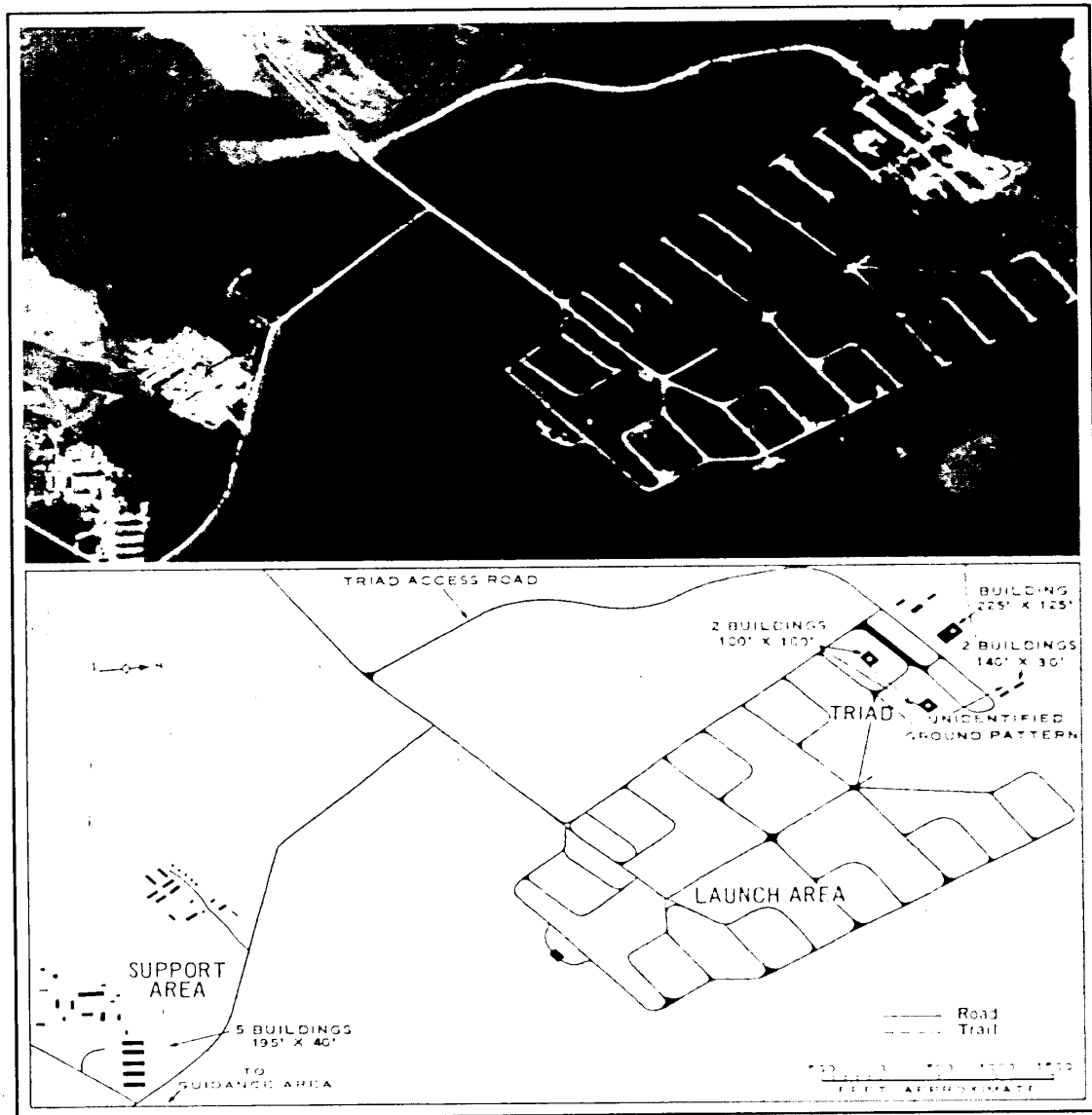


FIGURE 5. POSSIBLE AMM-ASSOCIATED FACILITY, SAM SITE E33-1.

25X1D

- 3 -

TOP SECRET CHESS RUFF

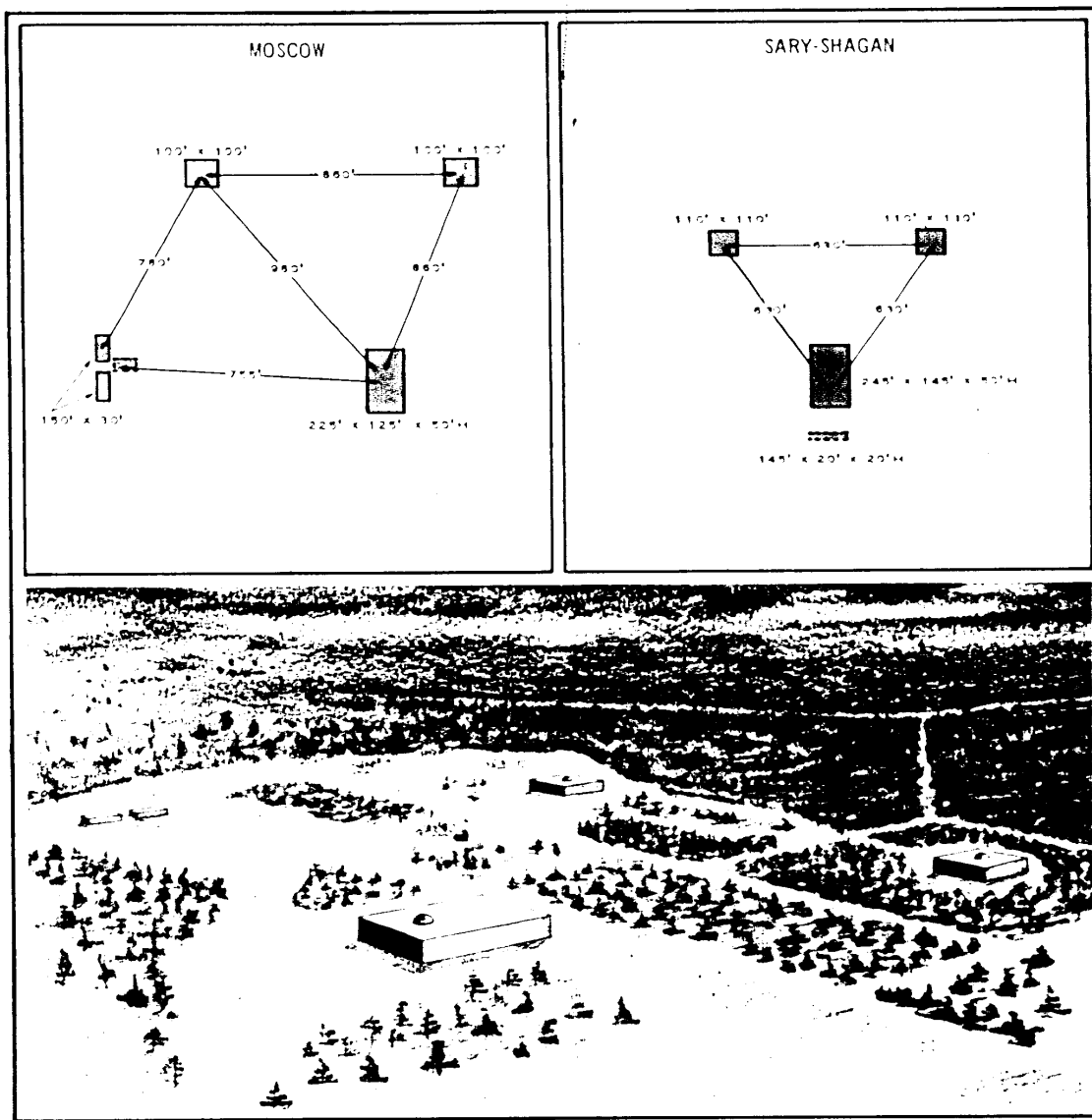


FIGURE 6. MOSCOW SAM SITE E33-1 COMPARED TO AVERAGE OF SSATC FACILITIES.

TOP SECRET CHESS RUFF

NPIC/R-103/64

25X1D was added between 25X1D the time of the next clear coverage of the support area.

25X1D Access Road. On photography of 25X1D a new road was under construction from the site service road to the northwest side of the launch area. It was complete on photography of 25X1D

25X1D Possible AMM-Associated Facility. There had been no activity at the northwest side of the launch area by 25X1D Not until photography of 25X1D was the site preparation for the triad apparent. By 25X1D a rectangular building, 225 by 125 feet and approximately 30 feet high, had been completed and included an unidentified circular object on the rear of its roof. Two smaller buildings, 100 by 100 feet, appeared complete and each had an unidentified circular object on its roof. A line connecting the objects on the roofs would form a triangle with legs of 860, 860, and 980 feet. The

25X1D site is oriented on an azimuth of 25X1D

On photography of 25X1D a T-shaped ground pattern 775 feet east of the rectangular building was first observed. The pattern was 30 feet wide with a bar of 280 feet and a stem of 115 feet. On photography of 25X1D two buildings were apparent on the bar of the T, each approximately 150 by 30 feet (Figures 5 and 6).

25X1D Other Construction. To the north of the launch area and on the opposite side of the large rectangular building from the T-shaped ground pattern, three additional buildings were first noted on photography of 25X1D The buildings are 110 by 70 feet, 75 by 50, and 75 by 40 feet. The triad access road passes south of these and the large rectangular building, continues to the T-shaped pattern, then loops back to join one of the rib roads of the herringbone launch area.

Table 1. Construction Chronology at Possible AMM-Associated Facilities

Date and Mission	Site E05-1	Site E15-1	Site E24-1	Site E35-1
25X1D	2 bldgs 195' x 40' in support area, poss. 3d bldg complete; triad access road complete	Not covered	1 bldg 195' x 40' in support area	1 bldg 195' x 40' in support area
	Not covered	1 bldg 195' x 40' in support area; triad access road complete	No activity at triad	Triad access road complete
	Not covered	Site preparation for triad	Not covered	Identification only
	Cloud covered	Site preparation continued	2 bldgs 195' x 40' added support area; site preparation for triad continued	Site preparation for triad
	Cloud covered	1 bldg 195' x 40' added support area; triad pattern clear; centerline ground pattern visible	2 bldgs 100' x 100' complete; walls of 225' x 125' bldg on T-shaped ground pattern visible	Cloud covered
	Cloud covered	2 bldgs 100' x 100' complete; walls of 225' x 125' bldg visible	225' x 125' bldg complete	1 bldg 225' x 125' & 2 bldgs 100' x 100' complete; T-shaped ground pattern visible

TOP SECRET CHESS RUFF

25X1D

NPIC, R-103, 64

ILLEGIB

Date and
Mission

Table 1. (Continued)

SUSPECT ACTIVITY

This part of the report briefly describes unidentified activity in the Moscow area that is suspect but cannot be directly related to activity at the possible ANM-associated facilities.

SA-1 SITES WITH RECENT UNIDENTIFIED EARTH SCARRING

Two SA-1 sites have had some unidentified activity since [REDACTED]

25X1D

SAM Site E04-1 [REDACTED] is at 56-20N 38-23E. Two generally circular areas of earth scarring were observed in the launch area on photography of [REDACTED] (Figure 7). These scars had not been present on the last previous cloud-free photography. [REDACTED]

25X1D

25X1A

25X1D

25X1D

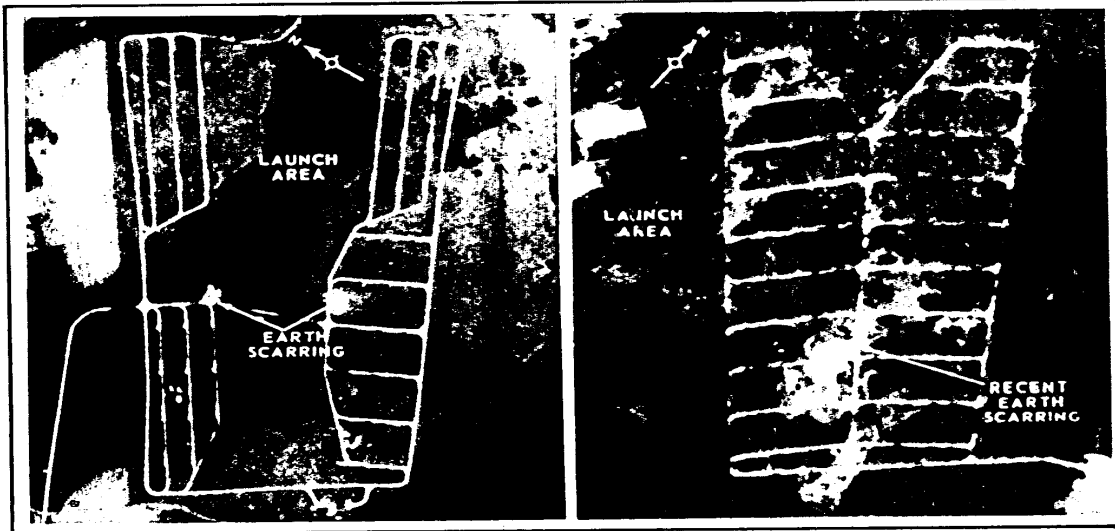


FIGURE 7. SA-1 SITES WITH UNIDENTIFIED EARTH SCARRING. [REDACTED]

25X1D

TOP SECRET CHESS RUFF

NPIC/R-103/64

25X1A

SAM Site C33-1 [REDACTED] is at 56-07N 37-11E. Earth grading on both sides of one of the rib roads in the launch area was apparent on photography of [REDACTED] (Figure 7). This scarring, which was about 500 feet wide, was not underway on [REDACTED]

SA-1 SITES WITH MISSILE CHECKOUT/STORAGE BUILDINGS

Missile checkout/storage buildings at three SA-1 sites have been reviewed to determine if changes or additions have occurred since the first KEYHOLE coverage of Moscow, [REDACTED]

SAM Site C19-1 [REDACTED] is at 55-17N 37-34E. A secured storage area between the launch and guidance areas contains nine drive-through missile checkout/storage buildings, each 310 by 100 feet (Figure 8). No changes in this site were observed between [REDACTED]

SAM Site C28-1 [REDACTED] is at

55-49N 36-52E. The site has nine drive-through missile checkout storage buildings 310 by 100 feet, and five parallel support buildings in a secured area between the launch and support areas (Figure 8). A rail spur which connects this installation with the Istra SAM assembly and storage facility [REDACTED] was under construction in [REDACTED] and had been completed by [REDACTED]. C28-1 was the only SA-1 site connected by rail to any of the Moscow SAM assembly and storage facilities in [REDACTED]

SAM Site C36-1 [REDACTED] is at 56-12N 37-36E. There are nine drive-through missile checkout/storage buildings, each approximately 310 by 100 feet, in a secured area southwest of the herringbone launch area. These buildings were present on the first clear KEYHOLE coverage, [REDACTED] and there had been no apparent change through the end of [REDACTED]

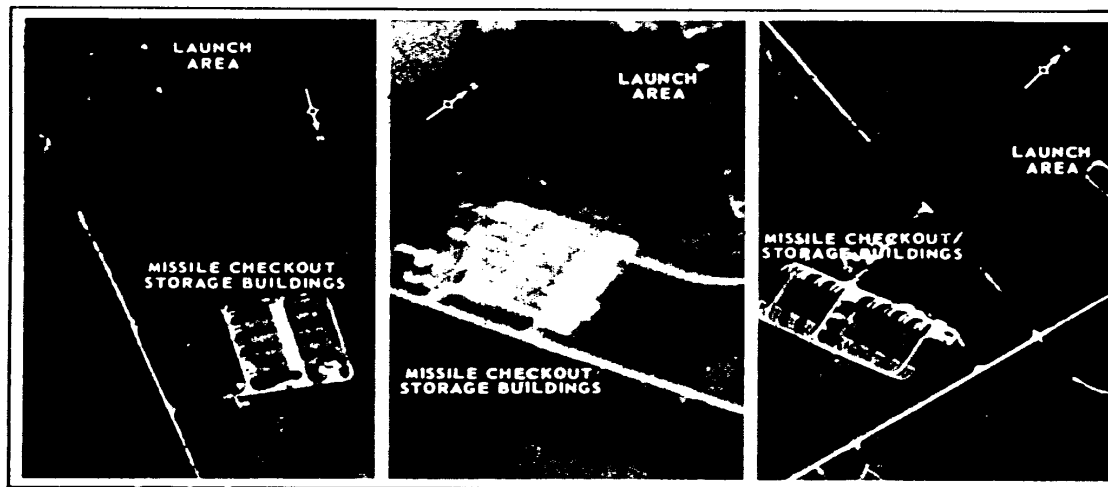


FIGURE 8. MISSILE CHECKOUT STORAGE BUILDINGS AT SA-1 SITES, [REDACTED]

OTHER ACTIVITY

Activity was apparent southwest of Moscow at 55-21N 36-38E on KEYHOLE photography of [REDACTED]. A rail line was present at that time, and by [REDACTED] the rail line and a building could be discerned on photography of poor image quality. On good photography of [REDACTED] it was apparent that the building was flat roofed, approximately 600 by 260 feet, and serviced by roads with wide-radius turns. Some of the roads, as well as the rail line, appeared to be under construction. Between [REDACTED] the road network had increased considerably (Figure 9).

Three unidentified plus configurations have been observed east of Moscow (Figure 10). Construction of two at 56-03N 38-30E began in the period between [REDACTED]. One plus is approximately 1,100 by 980 feet, the other approximately 840 by 780 feet. Each had an unidentified object at its center. On photography of [REDACTED] a plus was seen under construction at 55-24N 38-20E. It is apparently complete and is about 1,000 by 1,000 feet. There is a small support area between it and a primary road.

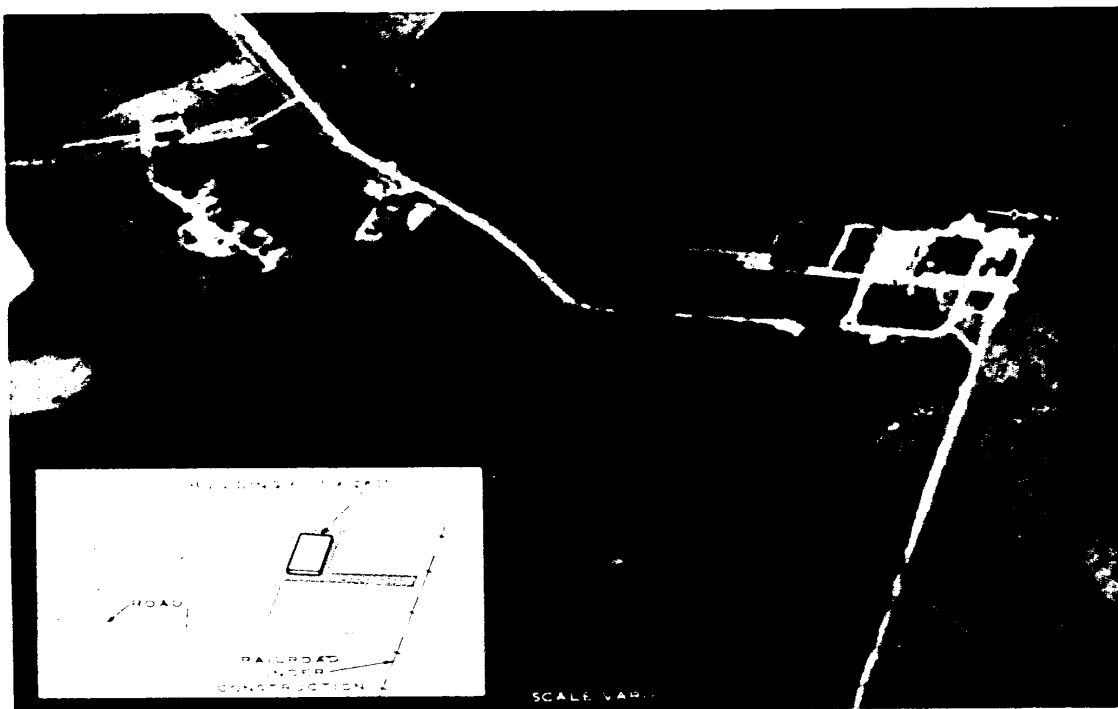


FIGURE 9. UNIDENTIFIED INSTALLATION [REDACTED]

TOP SECRET CHESS RUFF

NPIC/R-103/64

REFERENCES (Continued)

MAPS OR CHARTS

- DIA. US Air Target Chart, Series 200, Sheet 0154-22HL, 2d ed, Mar 63, scale 1:200,000 (SECRET)
- DIA. US Air Target Chart, Series 200, Sheet 0154-23HL, 2d ed, Apr 63, scale 1:200,000 (SECRET)
- DIA. US Air Target Chart, Series 200, Sheet 0167-4HL, 2d ed, Mar 63, scale 1:200,000 (SECRET)
- DIA. US Air Target Chart, Series 200, Sheet 0167-5HL, 2d ed, Apr 63, scale 1:200,000 (SECRET)
- DIA. US Air Target Chart, Series 200, Sheet 0167-10HL, 2d ed, Feb 63, scale 1:200,000 (SECRET)

DOCUMENT

1. CIA. NPIC/R-147/63, Possible Antimissile Missile Associated Facilities Moscow Area, USSR, Jul 63 (TOP SECRET CHESS RUFF)

REQUIREMENTS

- DIA. DIAXX 27-62
- CIA. C-RR3-80,334
- CIA. C-RR3-80,354
- CIA. C-RR3-80,320
- CIA. C-SB-80,107

NPIC Project

JN-212 62 (partial answer)

TOP SECRET CHESS RUFF